NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION

LAKE TROPHIC DATA

MORPHOMETRIC:

LAKE Kendall Pond	LAKE AREA (HA) 4.61
TOWN Londonderry	MAXIMUM DEPTH (M)
COUNTY Rockingham	MEAN DEPTH (M)
RIVER BASIN Merrimack	VOLUME (M^3)
LATITUDE 42^o 50' N	MUD SURFACE AREA (HA)
LONGITUDE 71^o 21' W	RELATIVE DEPTH
ELEVATION (FT) 216	SHORE CONFIGURATION
SHORE LENGTH (M) 1800	AREAL WATER LOAD (M/YR)
WATERSHED AREA (HA)	FLUSHING RATE (YR^{-1})
% WATERSHED PONDED 0	PHOSPHORUS RETENTION COEFF.

BIOLOGICAL: DATE	1 Feb 1985	5 SEP 1984
DOM. PHYTOPLANKTON (% total) 1	Asterionella (40%)	
2	Lyngbya (30%)	
NUMBER OF ALGAL GENERA	12	
SPECIES DIVERSITY	2.48	
CHLOROPHYLL a (ug/L)		
DOM. ZOOPLANKTON (% total) 1	No dominant	
2		
ROTIFERS/LITER	52	
MICROCRUSTACEA/LITER	0	
TOTAL ZOOPLANK. CNTS (cells/L)	52	
VASCULAR PLANT ABUNDANCE		Very Abundant
DOMINANT VASCULAR PLANTS 1		Typha
2		
3		
SECCHI DISK TRANSPARENCY (M)		
BOTTOM DISS. OXYGEN (mg/L)	9.8	
SEDIMENT: % ORGANIC MATTER		

LAKE TYPE: An artificial pond.

SUMMER THERMAL STRATIFICATION: YES ___ NO X WEAK ___

IF YES, VOLUME OF HYPOLIMNION _____ (m^3) THERMOCLINE DEPTH _____ (m)

CHEMICAL: (mg/L unless indicated otherwise) LAKE: Kendall Pond

	WINTER		SUMMER		
DATE	1 Feb 1985		5 SEP 1984		
DEPTH (M)	1.2		Outlet		
pH (UNITS)	6.8		7.0		
ALKALINITY (I. P.)	26.6		39.8		
ALKALINITY (F.E.P.)	27.9		47.2		
NITRITE+NITRATE NITROGEN					
TOTAL KJELDAHL NITROGEN					
TOTAL PHOSPHORUS	0.022		.010		
SPEC. CONDUCT. (μMhos/cm)	274		350.4		
APPARENT COLOR (UNITS)	35		35		
TRUE COLOR (440 nm)(UNITS)	44				
MAGNESIUM			3.1		
CALCIUM			20		
SODIUM			38		
POTASSIUM			3.0		
CHLORIDE			68		
TN : TP					
INORG-N : INORG-P					
[Mg+Ca] : [Na+K]			.56		
CALCITE SATURATION INDEX			1.4		

* = NOT DEFENSIBLE NR = NO RESULT

TROPHIC CLASSIFICATION: 1984

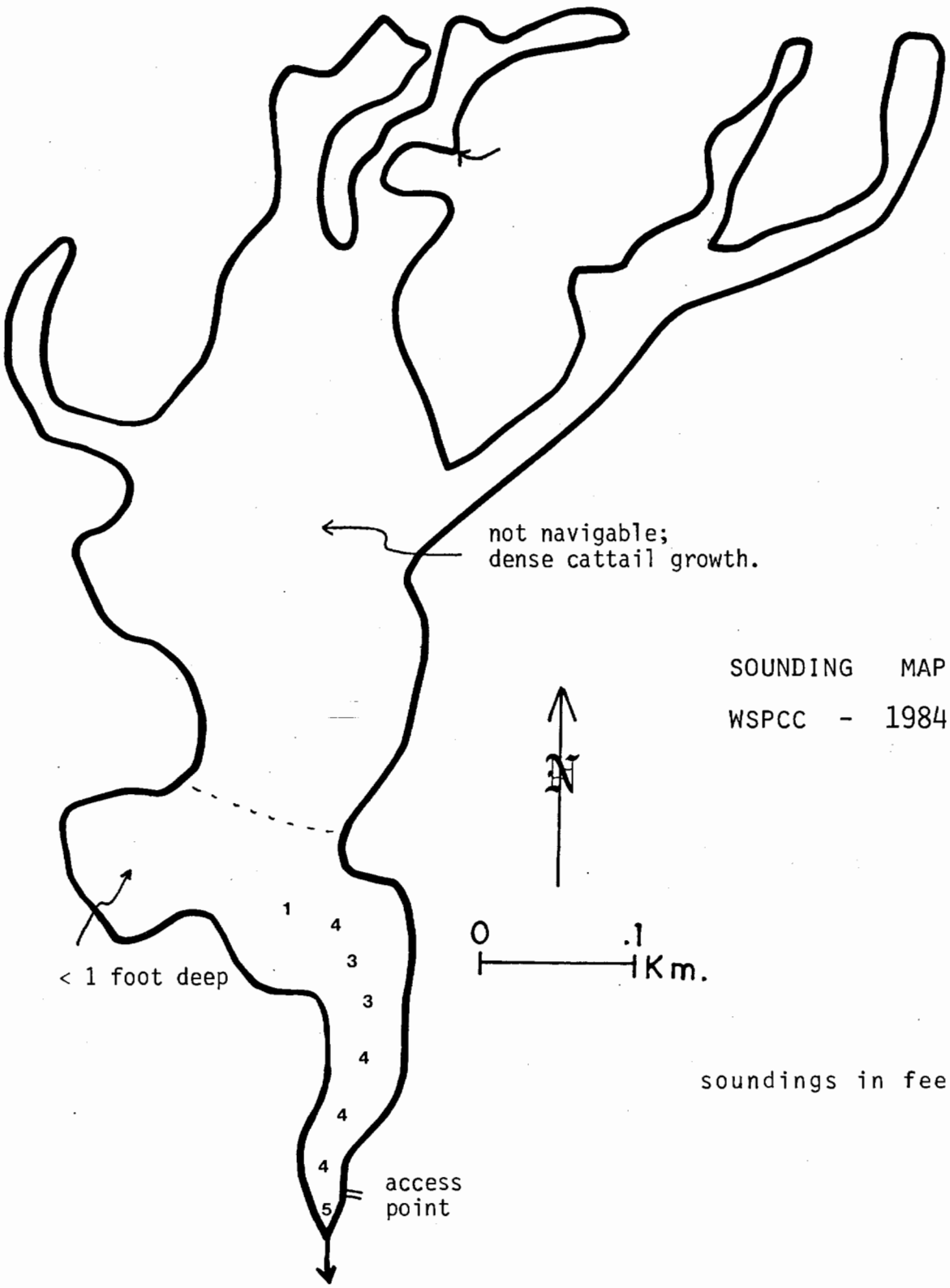
	D.O.	S.D.	PLANT ABUND.	CHL a	TOTAL PTS.	TROPHIC CLASS.
CLASSIFICATION POINTS:	–	–	4	–	4	EUTRO.

COMMENTS:

1. Also called Goss Pond.
2. This artificial pond was nearly completely filled in with plants.
3. The maximum depth observed was 5 feet. This was at the outlet where the water sample was collected.
4. No Secchi disk,or oxygen/temp. profile were measured--not enough water!
5. The eutrophic rating is based on the massive weed growth, since the other trophic criteria couldn't be measured.
6. No summer plankton sample was collected; a 2 foot vertical haul was collected in the winter.

KENDALL POND

LONDONDERRY



FIELD DATA SHEET

WATER BODY Kendall Pond TOWN Londonderry BY WSPCC

DATE COLLECTED 5 September 1984 WEATHER

STATION	DEPTH (M)	TEMP. (°C)	*DISSOLVED OXYGEN	OXYGEN: % SATURATION			

SECCHI DISK (M) _____

BOTTOM DEPTH (M) _____

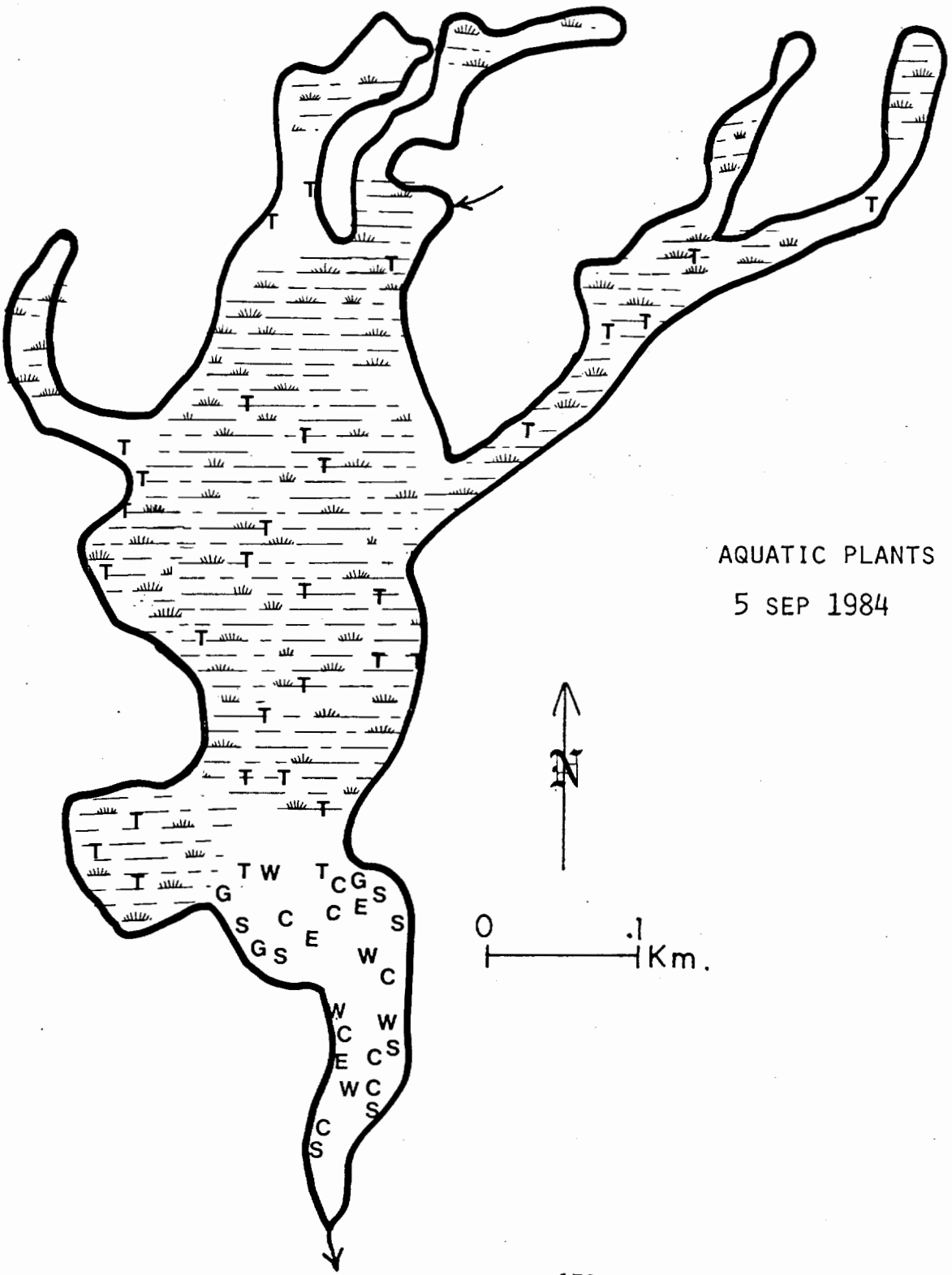
TIME _____

COMMENTS: There was very little open water in this weedy pond; the maximum water depth measured was 5 feet, too shallow for a profile. A Secchi disk reading was also not possible because of interference from the weeds.

* Dissolved oxygen values in mg/L

KENDALL POND

LONDONDERRY



AQUATIC PLANT SURVEY

LAKE Kendall Pond TOWN Londonderry DATE 9/5/84 BY WSPCC

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
E	Elodea	Waterweed	Sparse
S	Sparganium	Bur Reed	Abundant
W	Potamogeton	Pondweed	Common
C	Ceratophyllum demersum	Coontail	Abundant
G	Gramineae	Grass Family	Abundant
T	Typha	Cattail	Very Abundant

OVERALL ABUNDANCE Very Abundan

GENERAL OBSERVATIONS:

1. Cattails, and other marsh plants such as grasses and sedges, completely filled the upper areas of the pond for as far as the eye could see. It was impossible to navigate much beyond the small open-water area near the outlet.